

**IN THE CLAIMS:**

1. (Currently Amended) A drive circuit for a MEMS device, comprising:

an electrode driver; and

a switching network, coupled to an output of said electrode driver, said switching network comprising a first switch interposing said output and a first electrode of an axis of said MEMS device, a second switch interposing said output and a second electrode of said axis of said MEMS device, a third switch interposing said first electrode and an electrical ground, and a fourth switch interposing said second electrode and said electrical ground, that:

in a first configuration, couples said output to a said first electrode ~~of an axis of said MEMS device~~ and grounds ~~an opposing~~ said second electrode ~~of said axis of said MEMS device~~,  
and

in a second configuration, couples said output to said second electrode and grounds said first electrode.

2. (Original) The drive circuit as recited in Claim 1 wherein said electrode driver comprises:

a digital-to-analog converter; and

an amplifier that provides said output.

3. (Original) The drive circuit as recited in Claim 1 wherein said first and second configurations are mutually exclusive.

Claim 4 has been canceled without prejudice or disclaimer.

5. (Original) The drive circuit as recited in Claim 4 wherein said first and fourth switches operate in tandem, said second and third switches operate in tandem and said first and second switches are never simultaneously in an ON state.

6. (Original) The drive circuit as recited in Claim 1 further comprising:  
a second electrode driver; and  
a second switching network, coupled to an output of said second electrode driver that:  
in a first configuration, couples said output to a third electrode of a second axis of said MEMS device and grounds an opposing fourth electrode of said second axis of said MEMS device, and  
in a second configuration, couples said output to said fourth electrode and grounds said third electrode.

7. (Original) The drive circuit as recited in Claim 1 wherein said electrode driver and said switching network are embodied in an integrated circuit.

8. (Currently Amended) A method of driving a MEMS device, comprising:  
providing a switching network, coupled to an output of an electrode driver, said switching network comprising a first switch interposing said output and a first electrode of an axis of said MEMS device, a second switch interposing said output and a second electrode of said axis of said

MEMS device, a third switch interposing said first electrode and an electrical ground, and a fourth switch interposing said second electrode and said electrical ground;

assuming a first configuration in which ~~an~~ said output of ~~an~~ said electrode driver is coupled to a said first electrode ~~of an axis of said MEMS device~~ and ~~an opposing~~ said second electrode ~~of said axis of said MEMS device~~ is grounded; and

assuming a second configuration in which said output is coupled to said second electrode and said first electrode is grounded.

9. (Original) The method as recited in Claim 8 wherein said electrode driver comprises:

a digital-to-analog converter; and

an amplifier that provides said output.

10. (Original) The method as recited in Claim 8 wherein said first and second configurations are mutually exclusive.

Claim 11 has been canceled without prejudice or disclaimer.

12. (Original) The method as recited in Claim 11 further comprising:

operating said first and fourth switches in tandem; and

operating said second and third switches in tandem, said first and second switches never being simultaneously in an ON state.

13. (Original) The method as recited in Claim 8 further comprising:

assuming a first configuration in which an output of a second electrode driver is coupled to a third electrode of a second axis of said MEMS device and an opposing fourth electrode of said second of said MEMS device is grounded; and

assuming a second configuration in which said output is coupled to said fourth electrode and said third electrode is grounded.

14. (Original) The method as recited in Claim 8 wherein said steps of assuming are carried out in an integrated circuit.

15. (Currently Amended) An integrated circuit, comprising:

a plurality of MEMS devices each having first and second axes of tilt; and

a corresponding plurality of drive circuits, each comprising:

first and second electrode drivers each comprising a digital-to-analog converter and an amplifier for providing an output,

a first switching network, coupled to ~~an~~ said output of said first electrode driver that alternatively drives opposing first and second electrodes of a first axis of one of said plurality of MEMS devices, and

a second switching network, coupled to an output of said second electrode driver that alternatively drives opposing third and fourth electrodes of a second axis of one of said plurality of MEMS devices.

Claim 16 has been canceled without prejudice or disclaimer.

17. (Currently Amended) A method of manufacturing an integrated circuit, comprising:  
fabricating a plurality of MEMS devices each having first and second axes of tilt; and  
forming a corresponding plurality of drive circuits, each comprising:

first and second electrode drivers each comprising a digital-to-analog converter and  
an amplifier for providing an output,

a first switching network, coupled to ~~an~~ said output of said first electrode driver that  
alternatively drives opposing first and second electrodes of a first axis of one of said plurality of  
MEMS devices, and

a second switching network, coupled to an output of said second electrode driver that  
alternatively drives opposing third and fourth electrodes of a second axis of one of said plurality of  
MEMS devices.

Kindly cancel Claim 18 without prejudice or disclaimer.